

F-8480

AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1. - 5. (Canceled)

6. (New) A Faraday rotator for a Faraday isolator, the Faraday isolator comprising a roller-shaped magneto-optical crystal, a right circular hollow cylinder comprised of a permanent magnetic material surrounding the crystal and respective input and output polarizers adjacent respective opposite ends of the crystal and intersected by an axis of symmetry of the crystal, the cylinder being axially magnetized whereby a magnetic field thereof approximately parallel to the axis of symmetry extends into the hollow of the cylinder, the magnetic field running in only one direction from a north pole to a south pole, respective right cylindrical permanent magnets attached to respective end faces of the hollow cylinder-surrounded crystal, each of said end face magnets having an aperture therethrough which is coaxial with the axis of symmetry, wherein at least a region of one of the end face magnets at the north-magnetized end of the axially magnetized cylinder is radially magnetized from interior to exterior whereby a magnetic field of said one end face magnet has its north pole radially

inward and its south pole radially outward and at least a region of the other end face magnet at the south-magnetized end of the axially magnetized cylinder is radially magnetized from exterior to interior whereby a magnetic field of said other end face magnet has its south pole radially inward and its north pole radially outward.

7. (New) A Faraday rotator according to claim 6, wherein said regions are substantially sectors.

8. (New) A Faraday rotator according to claim 6, wherein said regions are in the form of respective discrete parts which, when assembled with other parts, form the respective end face magnets.

9. (New) A Faraday rotator according to claim 8, wherein the discrete parts are each substantially in the shape of a respective sector.

10. (New) A Faraday rotator according to claim 6, wherein the respective magnetic fields of the end face magnets are oriented obliquely with respect to the axis of symmetry.